

**Development Infrastructure Study**

**Earl's Court and West Kensington Opportunity  
Area Draft Joint Supplementary Planning  
Document**

**Viability Assessments of Each of the  
Development Capacity Scenarios**

**Completed on behalf of  
The Royal Borough of Kensington and Chelsea  
The London Borough of Hammersmith and  
Fulham and  
The Greater London Authority**

**by**

**DVS**

**November 2011**

# **Development Infrastructure Study**

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## 1.0 Introduction

DVS have been instructed by the Royal Borough of Kensington and Chelsea, London Borough of Hammersmith and Fulham and the Greater London Authority to undertake a Development Infrastructure Study based on the Development Capacity Scenarios contained in the Earl's Court and West Kensington Opportunity Area Draft Joint Supplementary Planning Document (SPD) (First Draft March 2011)

The Study has been undertaken using information provided by the Three Authorities, and our own research into both values and costs. In some areas we have adopted the figures provided if we believe they are reasonable.

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We have undertaken cash flow models to prepare viability assessments to test the three scenarios and this report summaries the results of those assessments.

## 2.0 Study Brief

The study brief was issued on 17 May 2011 and in summary requires the following areas to be included

- a) Development Capacity and viability
- b) Infrastructure requirements and costs

### Development capacity and viability

- a) To undertake a viability assessment of each of the Development Capacity Scenarios (No's 1, 2 and 3) contained in the Earl's Court and West Kensington Opportunity Area Draft Joint Supplementary Planning Document (SPD) based on the Working Development Capacity Figures. This assessment should include whether this level of development is economically viable given the forecast supply and demand for residential and commercial property in the Opportunity Area (OA).
- b) To establish a cash flow model to test and forecast the viability of the proposed development scenarios and to calculate developer contributions for all development including residential and commercial uses.
- c) To identify an appropriate level, tenure mix, unit size and mix of affordable housing that can be provided in light of the other infrastructure requirements including investigation of an agreed range of affordable housing.
- d) To provide recommendations on likely phasing, build out and take up rates in order to set the basis for a model that accurately reflects the risks and opportunities of the project.

### Infrastructure requirements and costs

- a) To provide a full analysis of scheme costs
- b) To include all infrastructure requirements including some public transport intervention, roads, open space, public realm utilities and social infrastructure (that have been identified in the SPD) that are required to support the proposed level of development in the OA.

- c) To include construction costs
- d) To include any exceptional construction costs arising from the proposed decking over the existing rail infrastructure, including the retained elements of the TFL depot and any other exceptional costs associated with the development in the vicinity of such infrastructure.
- e) To include any exceptional costs arising from the potential phased regeneration of the housing estates in the OA.
- f) To include any other reasonable exceptional costs
- g) To identify essential and non essential infrastructure costs

### 3.0 The Development Capacity Scenarios

The Earl's Court and West Kensington Opportunity Area Draft Joint Supplementary Planning Document contains 3 Development Capacity Scenarios which have been assessed and are outlined below:

Scenario	Housing Capacity	Residential Floorspace	Total commercial Floorspace	Total Floorspace
1	4000	364,000 sq m	129,500 sq m	493,500 sq m
2	6000	546,000 sq m	203,500 sq m	749,500 sq m
3	8000	728,000 sq m	277,500 sq m	1,005,500 sq m

Each of the three Development Capacity Scenarios are illustrated as masterplan solutions in the SPD which we have taken regard of.

The total site area of the OA is 37.2 hectares but net of major thoroughfares totals 32.6 hectares. Assuming 70% is for residential and 30% for commercial etc the resultant residential area for Scenario's 2 and 3 is 22.8 hectares whilst Scenario 1 is based on a site area of 12.4 hectares.

### 4.0 Scheme Assumptions and Inputs

The following assumptions and inputs have been made in order to assess the viability of each scenario and are dealt with on a scheme basis:

#### a) Residential Split

**Scenario 1** – 4,000 dwellings with 800 in the Royal Borough of Kensington and Chelsea (RBKC) and 3,200 in London Borough of Hammersmith and Fulham (LBHF) with a private and affordable split as follows:

Borough	Private	Affordable	Social Rented	Intermediate/Affordable Rented
RBKC	50% 400 units	50% 400 units	85% 340 units	15% 60 units
LBHF	60% 1,920 units	40% 1,280 units		100% 1,280 units

**Scenario 2** – 6,000 dwellings with 800 in the borough of RBKC and 5,200 in the borough of LBHF with a private and affordable split as follows:

Borough	Private	Affordable	Social Rented	Intermediate/Affordable Rented
RBKC	50% 400 units	50% 400 units	85% 340 units	15% 60 units
LBHF	60% 3,120 units	40% 2080 units	Reprovision 590 units	Remainder 1,490units

**Scenario 3** – 8,000 dwellings with 800 in the borough of RBKC and 7,200 in the borough of LBHF with a private and affordable split as follows:

Borough	Private	Affordable	Social Rented	Intermediate/Affordable Rented
RBKC	50% 400 units	50% 400 units	85% 340 units	15% 60 units
LBHF	60% 4,320 units	40% 2,880units	Reprovision 590 units	Remainder 2,290 units

In addition we have assumed that 40% of units are flats and 60% are houses, which we believe is not unreasonable and sizes are based on an average of 70 sq m plus a generous 30% allowance of net to gross.

**Deleted:** which is in accordance with the assumption made on behalf of the proposed developer

**b) Residential Values – Private**

Following research into current average sales values we have adopted £13,500 per sq m for units in RBKC (Premium) and £11,000 per sq m for units in LBHF (Standard) as part of the Gross Development Value (GDV).

**c) Residential Values – Affordable**

We have used an average for both social rented and intermediate, including affordable rented of £2,500 per sq m in RBKC but £2,260 per sq m in LBHF.

**d) Ground Rents**

We have used an average of £400 per annum on all private flats capitalised at 6%.

e) **Commercial Values**

Type	Rent per Sq m	Yield	Purchasers Costs	Rent Free
Offices	£414	6%	5.75%	12 months
Retail	£377	6%	5.75%	12 months
Hotel 1	Capital Value of £300,000 per bedroom		5.75%	
Hotel 2	Capital Value of £125,000 per bedroom		5.75%	
Leisure	£129	6%	5.75%	12 months
Other non residential	£108	8%	5.75%	
Health Provision	£240	6.5%	5.75%	

f) **Growth Rates**

Where growth has been applied a net rate of 2.5% per annum compound has been used. This is the net amount after growth in build costs etc has also been taken into account.

g) **Residential Build Costs**

Our Quantity Surveyor has researched the appropriate costs to be utilised as follows:

Type	Rate per Sq M
Private Residential Flats Premium	£3,283
Private Residential Houses Premium	£4,263
Private Residential Flats Standard	£2,379
Private Residential Houses Standard	£2,379
Affordable – Rented	£1,475
Affordable - Intermediate	£1,647

h) **Sustainability**

A rate of £3,500 per unit has been included for code 3 costs only at this stage.

i) **Commercial Build Costs**

Type	Rate per Sq M
Offices	£1,905
Retail - Shell	£883
Boutique Hotel	£3,305
Budget Hotel	£2,153
Leisure	£2,347
Other non residential	£2,314
Health Provision	£2,314

j) **Other Plot Related Costs**

In addition other plot related costs have been applied including over-sailing costs, occupier contributions, building regs and NHBC fees etc, additional planning/reserved matters costs and void management costs for each scenario as follows:

Scenario	Other Costs
Scenario 1	£7,500,000
Scenario 2 and 3	£19,614,000

k) **Contingency**

A contingency rate of 3% has been added to all build costs in the appraisals

l) **Infrastructure and Abnormals**

This includes all of the site enabling works, roads, structural and civil infrastructure, off-site road improvements, site and off-site public transport improvements, utilities and site services, infrastructure abnormals which includes the decked structure over the railways etc, car parking, new building abnormals and public spaces.

These costs have been assessed on a range of rates and then applied to the gross size of each scenario in order to compare as follows:

Scenario	Total Sq M	Total Costs	Infrastructure Abnormals
Scenario 1	554,481	£886,060,000	£296,093,000
Scenario 2	843,273	£1,347,550,000	£450,308,000
Scenario 3	1,132,065	£1,809,040,000	£604,523,000

In addition Fees of 8% and a contingency of 3% have also been added.

m) **Professional Fees**

A rate for all professional fees of 10% has been adopted which we believe is reasonable.

n) **Section 106/Social Infrastructure Costs**

The SPD details the requirements for each scenario which have been included in our assessments as follows:

Item	Scenario 1	Scenario 2	Scenario 3
Primary Education	£16,000,000	£22,000,000	£33,000,000
Secondary Education	£10,000,000	£15,000,000	£20,000,000
Health Care	800 sq m	1,200 sq m	1,600 sq m
Open Space etc	Incl in scheme costs	Incl in scheme costs	Incl in scheme costs
Library	£1,091,800	£1,638,200	£2,184,600

In addition we have also considered the inclusion of the Mayoral Community Infrastructure Levy in accordance with the Draft Charging Schedule dated June 2011. The Mayoral CIL, the adoption of which is anticipated in April 2011, would be applied ahead of the section 106 costs above and result in the following approximate sums being applied to each scenario:

Scenario	CIL Costs
Scenario 1	£9.4m
Scenario 2	£14.46m
Scenario 3	£19.52m

**o) Other Costs And Fees**

Detailed below are other costs and fees that are also included in our assessment of each scheme which we believe are the current market norm as follows:

Costs/Fees	Rate
Marketing Costs	1.5% of GDV
Residential Agent Sale Fees	1.0% of Residential GDV
Residential Legal Sale Fees	0.5% of Residential GDV
Affordable Agents Sale Fees	1.0% of Affordable GDV
Affordable Agents Legal Fees	0.5% of Affordable GDV
Commercial Agent Sale Fees	1.0% of Commercial GDV
Commercial Legal Sale Fees	0.5% of Commercial GDV
Commercial Agents Letting Fees	10.0% of Commercial Rental Value
Commercial Legal Letting Fees	5% of Commercial Rental Value

**p) Finance**

We have adopted an all inclusive finance rate of 6.5% on the basis that the whole scheme is debt funded which we do not feel is unreasonable and will depend on the overall timescale and cash flow of the scheme which can only be in outline at present.

**q) Scheme Programme/Phasing**

We have assumed a start on site in 2013 since we understand that Earl's Court is required for the Olympics in 2012. In addition we are the view that a sales rate for the private residential of 250 units per year is achievable which will drive the programme as follows for each scheme:

Scenario	No of Houses	Scheme Programme
Scenario 1	4000	2013 to 2023
Scenario 2	6000	2013 to 2028
Scenario 3	8000	2013 to 2033

It is also likely that there will be phasing of both the residential and commercial space although it will not affect the overall programme and cash flow at this stage.



r) **Profit levels**

For the purposes of these assessments we have assumed the following profit levels which are the market norms

Private Residential Profit Level – 20% of Private Residential GDV  
Affordable Profit Level – 6% of Affordable GDV  
Commercial Profit Level – 15% of Commercial GDV

s) **Land Values**

Following detailed discussions with RBKC, we have adopted, at this stage, the estimated Existing Use Values provided to us of the various sites required to undertake each of the scenarios however these may well need to be up dated when further research has been undertaken and clarification received.

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The following overall land values have been adopted for each scheme.

Scenario	Adopted Land Values
Scenario 1	
Scenario 2	
Scenario 3	

In addition we have also included stamp duty at 4% and fees etc at 1.75%.

t) **Other land and overall scheme related costs**

In addition to the land acquisition costs and the plot related costs there are additional land costs relating to the regearing of leases plus relocation costs and overall scheme costs including decant costs and estate costs etc the total of which detailed below:

Scenario	Other land/Scheme Costs
Scenario 1	
Scenario 2	
Scenario 3	

**5.0 Results of Viability assessments**

We have undertaken detailed cash flow excel based appraisals of each of the scenarios to assess the viability which include all of the assumptions and inputs detailed above both with and without the Mayoral CIL.

The results of these assessments are detailed below in summary:

- A) Policy Compliant with no growth and including Mayoral CIL

Scenario	Gross Development Value	Gross Development Costs	Surplus/Deficit
Scenario 1	£3,454,138,000	£3,864,160,000	- £410,022,000
Scenario 2	£5,229,697,000	£5,647,404,000	- £417,707,000
Scenario 3	£7,002,254,000	£7,102,709,000	- £100,455,000

With these assumptions none of the scenarios are viable

B) Policy Compliant with no growth but excluding Mayoral CIL

Scenario	Gross Development Value	Gross Development Costs	Surplus/Deficit
Scenario 1	£3,454,138,000	£3,851,407,000	- £397,269,000
Scenario 2	£5,229,697,000	£5,626,584,000	- £396,887,000
Scenario 3	£7,002,254,000	£7,075,044,000	- £72,791,000

With these assumptions none of the scenarios above are viable

C) Policy Compliant with Net Growth as detailed under 4f and including CIL

Scenario	Gross Development Value	Gross Development Costs	Surplus/Deficit
Scenario 1	£3,540,333,000	£3,852,157,000	- £311,824,000
Scenario 2	£5,361,376,000	£5,600,633,000	- £239,257,000
Scenario 3	£7,178,564,000	£7,062,669,000	£115,895,000

D) Policy Compliant with Net Growth as detailed under 4f but excluding CIL

Scenario	Gross Development Value	Gross Development Costs	Surplus/Deficit
Scenario 1	£3,540,333,000	£3,839,898,000	- £299,564,000
Scenario 2	£5,361,376,000	£5,580,506,000	- £219,129,000
Scenario 3	£7,178,564,000	£7,035,679,000	£142,884,797

Under C) and D) with these assumptions only Scenario 3 is viable.

We have also considered scenarios 1 and 2 on the basis of reduced affordable housing levels in order to determine viability as follows:

E) Reduced affordable housing on the basis of 60% private and 40% affordable for RBKC and 70% private with 30% affordable for LBHF but with the current tenure split including CIL.

Scenario	Gross Development Value	Gross Development Costs	Surplus/Deficit
Scenario 1	£3,874,090,000	£3,963,585,000	- £89,495,000
Scenario 2	£5,869,270,000	£5,759,163,000	£110,108,000

- F) Reduced affordable housing on the basis of 60% private and 40% affordable for RBKC and 70% private with 30% affordable for LBHF but with the current tenure split excluding CIL

Scenario	Gross Development Value	Gross Development Costs	Surplus/Deficit
Scenario 1	£3,874,090,000	£3,949,749,000	- £75,659,000
Scenario 2	£5,869,270,000	£5,736,501,000	£132,769,000

On the basis of reduced affordable housing under E) and F) scenario 2 is now viable whilst scenario 1 is closer to viability.

- G) Reduced affordable housing on the basis of 70% private and 30% affordable for RBKC and 80% private with 20% affordable for LBHF but with the current tenure split including CIL.

Scenario	Gross Development Value	Gross Development Costs	Surplus/Deficit
Scenario 1	£4,208,047,000	£4,091,816,000	£116,232,000

- H) Reduced affordable housing on the basis of 70% private and 30% affordable for RBKC and 80% for private with 20% affordable for LBHF but with the current tenure split excluding CIL.

Scenario	Gross Development Value	Gross Development Costs	Surplus/Deficit
Scenario 1	£4,208,047,000	£4,076,345,000	£131,701,918

On the basis of reduced affordable housing under G) and H) scenario 1 is now viable.

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## 6.0 Conclusions

Taking account of all the assumptions and inputs above we detail below a summary of the scenarios and their viability in accordance with our assessments:

### Summary Assessments including the Mayoral CIL

Scenario	Policy Compliant Scheme	Policy Compliant Scheme with Growth	Reduced Affordable Housing Private 60% Affordable 40%	Reduced Affordable Housing Private 70% Affordable 30%
Scenario 1	- £410,022,000	- £311,824,000	- £89,495,000	Viable
Scenario 2	- £417,707,000	- £239,257,000	Viable	Viable
Scenario 3	- £100,455,000	Viable	Viable	Viable

... [1]

## Summary Assessments excluding the Mayoral CIL

Scenario	Policy Compliant Scheme	Policy Compliant Scheme with Growth	Reduced Affordable Housing Private 60% Affordable 40%	Reduced Affordable Housing Private 70% Affordable 30%
Scenario 1	- £397,269,000	- £299,564,000	- £75,659,000	Viable
Scenario 2	- £396,887,000	- £219,129,000	Viable	Viable
Scenario 3	- £72,791,000	Viable	Viable	Viable

... [2]

The key reasons why scenarios 1 and 2 are not viable without reducing the level of affordable housing is due to costs related to the re-provision of the existing TFL depot and land and also the abnormal costs of the decking over the railways without sufficient private residential housing.

When the scheme is viable as described above it can support all of the costs detailed above including the site specific Infrastructure and Abnormal and Social Infrastructure costs as set out in the SPD.

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 November 2011

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